8/29/2024

Project Planning

**Group Members:**

* Thobejane Dineo: ST10359029
* Muthambi Pfano: ST10205389
* Botabotsa Matsatsi: ST10067190
* Marakalala Lesiba Harvey: ST10219958

LORAX GROUP

**Project Planning: Central Karoo Community Network Project**

**Project Phases, Milestones, and Deliverables**

**1. Project Phases** The project is divided into distinct phases, each with specific objectives, tasks, and deliverables. These phases help ensure that the project progresses systematically and that any issues are identified and addressed early.

* **Initiation Phase:** This is the foundation of the project, where the project idea is explored, and the feasibility is assessed. Key activities include defining the project scope, identifying stakeholders, and developing the project charter.
* **Planning Phase:** In this phase, the project plan is developed, outlining the timeline, budget, resources, and risk management strategies. Detailed planning ensures that the project stays on track and within budget.
* **Execution Phase:** The network infrastructure is implemented during this phase. It involves procuring equipment, configuring systems, and deploying the network. This is the phase where the bulk of the project work occurs.
* **Monitoring and Control Phase:** Concurrent with execution, this phase ensures that the project stays on course. Regular checks are performed to monitor progress, manage risks, and ensure quality standards are met.
* **Closing Phase:** This final phase involves wrapping up the project, including final testing, stakeholder review, and documentation. The project is formally closed after the network is operational and meets all requirements.

**2. Milestones** are key points in the project timeline that signify the completion of significant tasks or phases. They act as checkpoints to assess progress and make necessary adjustments.

* **Milestone 1: Project Charter Approval (End of Initiation Phase)** The project officially begins when the project charter is approved by the stakeholders and sponsors. This milestone confirms the project’s scope, objectives, and resources.
* **Milestone 2: Completion of Detailed Project Plan (End of Planning Phase)** This milestone marks the completion of the project plan, which includes the timeline, cost estimates, resource allocation, and risk management plan. Approval of the plan by stakeholders signifies readiness to move forward with execution.
* **Milestone 3: Network Infrastructure Deployment (Mid-Execution Phase)** The successful installation and initial configuration of the network components, such as wireless access points and servers, marks this milestone. This is a critical point as it transitions the project from planning to operational testing.
* **Milestone 4: System Testing and Quality Assurance (End of Execution Phase)** Upon completion of all implementation tasks, the system undergoes rigorous testing. This milestone ensures that the network meets all performance and security requirements before it is fully operational.
* **Milestone 5: Project Closure and Handover (End of Closing Phase)** The project concludes with the final review, documentation, and handover of the network to the district. This milestone marks the official completion of the project.

**3. Deliverables** are tangible outcomes or products resulting from the completion of project tasks. Each phase and milestone produce specific deliverables that contribute to the project's overall success.

* **Initiation Phase Deliverables:** Project charter, stakeholder analysis, and feasibility study.
* **Planning Phase Deliverables:** Detailed project plan, cost breakdown, and risk management plan.
* **Execution Phase Deliverables:** Installed and configured network infrastructure, security systems, and documentation of configurations.
* **Monitoring and Control Phase Deliverables:** Progress reports, quality assurance reports, and risk management updates.
* **Closing Phase Deliverables:** Final testing results, user training materials, system documentation, and project closure report.

**4. Cost Breakdown** The project's estimated budget is R5.5 million. The cost breakdown justifies the expenditure across different categories, ensuring that resources are allocated efficiently.

* **Equipment and Hardware (3 million Rands):** This includes the purchase of Smart Bridges multi-band access points, client units, sectoral and omnidirectional antennas, servers, security systems, and other necessary hardware. Given the scale of the network and the need for reliable infrastructure, this represents the largest portion of the budget.
* **Labor and Professional Services (R1.5 million):** This includes the cost of hiring skilled network engineers, IT technicians, and security specialists to design, implement, and test the network. This also covers training costs for local personnel who will maintain the network post-implementation.
* **Licensing and Software (R500,000):** This includes the purchase of software licenses for network management, security applications, and office productivity tools that will be used by government employees and healthcare providers.
* **Contingency Fund (R500,000):** This reserve is set aside to cover unexpected costs that may arise during the project, such as delays, additional equipment needs, or unforeseen technical challenges.

**Example of Milestones in Project Development**

1. **Project Charter Sign-off:** This milestone marks the official start of the project, with the project charter agreed upon and signed by all stakeholders.
2. **Completion of Network Design:** This milestone is achieved when the network architecture is fully designed, including detailed schematics and technical specifications.
3. **Installation of Core Infrastructure:** Reaching this milestone means that all essential hardware has been installed and configured according to the design specifications.
4. **System Testing Completion:** This milestone is met when all testing phases (e.g., functionality, performance, security) are complete, and the network is ready for deployment.
5. **Final Project Handover:** The last milestone signifies the project’s completion, with all deliverables handed over to the stakeholders, and the network fully operational.